84957

Z/008/60/054/011/003/005
E112/E453

Vapour-Phase Partition Chromatography of Mixtures of Hydrogen, Paraffins and Olefins, Using the Micro-Flare Detector

olefins. Modifications are: Replacement of nitrogen as carrier gas by air. It is claimed to lead to a more perfect combustion of the eluted components and to greater constancy of the length of flame. Lengthening of the flame during elution is held to be responsible for some inaccuracies in the Wirth method. It is also held that the temperature of the flame contributes more to the sensitivity of the method than its length. A schematic arrangement of the chromatographic apparatus is given: Hydrogen, from a cylinder, and air, from a compressor, are reduced to constant pressure through diaphragm valves. The flow of the gases is controlled by a second set of valves and metered through a capillary flowmeter and through drying tubes, filled with magnesium chlorate to the heads of the columns. Air passes through a chromatographic column packed with activated sodium-aluminium silicate (Alusil) and provided with a sample introducing device. The column is placed in an electrically heated furnace, the temperature of which is raised during analysis from 20 to 190°C. Hydrogen passes through a dummy column and is mixed with the carrier gas immediately before

Card 2/5

84757
Z/008/60/054/011/003/005
E112/E453

Vapour-Phase Partition Chromatography of Mixtures of Hydrogen, Paraffins and Olefins, Using the Micro-Flare Detector

combustion. Details of detector construction are given. Several variables in flare design were considered. Best results were obtained with a platinum capillary with a bore of 0.20 to 0.28 mm. (Wirth uses stainless steel.) The effects of ratios of hydrogen to carrier gas on the sensitivity of the method was studied. Higher hydrogen contents in the gas mixtures give higher base lines and more complete combustion. Lower base lines, however, show better peak characteristics. The author has established experimentally that best results were obtained with a hydrogen flow rate of 0.45 ml/sec for an air flow of 0.35 ml/sec. Under these conditions, the basis temperature of the flame, determined by the thermocouple at a distance of 8 mm from the tip of the flame, amounted to 400°C. Different types of thermocouples were considered. Iron-constantan was found the most promising. However, owing to rapid oxidation of the iron wire, variations in the constants of the thermocouple were experienced. Attempts to improve the thermocouple stability are described. Sealing into a thin-walled glass capillary failed, owing to

Card 3/5

84957

Z/008/60/054/011/003/005
E112/E453

Vapour-Phase Partition Chromatography of Mixtures of Hydrogen, Paraffins and Olefins, Using the Micro-Flare Detector

excessive thermal inertia. Similar, not quite satisfactory results were obtained with copper-constantan. Best results were finally achieved by applying a silicone protective coating to iron-constantan. Response to different types of thermocouples was tested by following the partition chromatogram of hydrogen-methane mixtures and results are presented graphically. The superiority of silicone-coated iron-constantan is clearly demonstrated. Results of the chromatographic partition of hydrogen, paraffins and olefins from C_1 to C_6 - the object of the present study - are tabulated, using the micro-flare detection and comparing to detection by the gas density balance method. A very good agreement between the results by both methods was established. The method permits the determination of hydrogen in the presence of hydrocarbon mixtures. No oxidation of the hydrocarbons by the carrier gas (air) was noticed even when the temperature of the chromatographic column was raised to 190°C. Results are based on 10 determinations and showed good reproducibility. Acknowledgments to Engineer J. Janák, Gas Analysis Laboratory, ČSAV, Brno, for supplying data

Card 4/5

Z/008/60/054/011/003/005
E112/E453

Vapour-Phase Partition Chromatography of Mixtures of Hydrogen, Paraffins and Olefins, Using the Micro-Flare Detector

on the design of flame detector. There are 5 figures (showing a schematic arrangement of the chromatographic apparatus, a drawing of the cross section of the detector, the electrical circuit diagram and 2 graphs), 2 tables and 5 references. 2 Czech and 3 English.

ASSOCIATION: Stalinovy závody, n.p., Záluží v Krusných horách (Stalin Works, Záluží)

SUBMITTED: November 17, 1959

Card 5/5

BARENBOYM, A.M., kand. tekhn. nauk; GALIYEVA, T.M., inzh.; GINZBURG, D.B., prof.; GRISSIK, A.M., inzh.; ZIMIN, V.N., dots.; KUSYAK, V.A., kand. tekhn. nauk; RUTMAN, E.M., inzh.; KHODOROV, Ye.I., kand. tekhn. nauk; CHIZHSKIY, A.F., kand. tekhn. nauk

[Heat calculations for furnaces and dryers of the silicates industry] Teplovye raschety pechei i sushilok silikatnoi promyshlennosti. Izd.2., perer. i dop. Moskva, Stroiizdat, 1964. 495 p. (MIRA 17:12)

ORAZMETOV, Z.; GORELKIN, L.M.; POTYAYEV, M.Ye.; ZARUDI, Ye.O., metodist; MITENEV, V.S.; VASIL'YEV, A.V.; GORSHENKOV, N.G.; RUTKOVSKIY, O.O.; KUSYAPKULOVA, T.Sh.

Letters to the editors. Geog. v shkole 22 no.2:72-76 Mr-Ap '59. (MIRA 12:6)

1. 1-ya shkola pos. Andreyevka Turkmenskoy SSR (for Orazmetov). 2. Shkola pri shakhte No.11 Karachayevskogo rayona Stavropol'skogo kraya (for Gorelkin). 3. Andreyevskaya semiletnyaya shkola Penzenskoy oblasti (for Potyayev). 4. Bashkirskiy institut usovershenstvovaniya uchiteley (for Zarudi). 5. Rayonnyy pedagogicheskiy kabinet s.Kich-Gorodok Vologodskoy oblasti (for Mitenev). 6. Alekseyevskaya shkola Stalingradskoy oblasti (for Vasil'yev). 7. Yakhromskaya shkola No.2 Moskovskoy oblasti (for Gorshenkov). 8. 4-ya shkola g.Alma-Ata (for Rutkovskiy). 9. 64-ya shkola g.Alma-Ata (for Kusyapkulova).

(Geography--Study and teaching)

L 26505-66 EWP(m)/EWT(1) GS

ACC NR: AT6008147 UR/0000/65/000/000/0072/0080 36 B+1

AUTHOR: Saykovskiy, M.I.; Dorfman, A.Sh. (Candidate of technical sciences); Didenko, O.I.; Kusyuk, A.I.; Stepanenko, A.P.

ORG: None

TITLE: Results of aerodynamic investigation of the compressor intake on models and in full scale

SOURCE: AN UkrSSR. Techeniya zhidkostey i gazov (Flows of liquids and gases) Kiev, Naukova dumka, 1965, 72-80

TOPIC TAGS: compressor design, aerodynamic test, test model

ABSTRACT: The paper describes scale model and full scale aerodynamic tests on compressor intakes. Rigidly oriented 3-channel total pressure tubes installed in a rotatable ring were used to measure the flow turning angle, velocity, and total air pressure. Schematics of the compressor intake are shown. The energy loss coefficient, ξ, of the intake was calculated from the average loss of total pressure, Δ_0, the average ram density, ρ, the average normal velocity, v_n, and the compressibility correction factor δ ($\delta = 1 - M^2/4$) using: $\xi = 2\Delta_0/\rho_0 \cdot v_n$. (1) Conditions and measurement results are given for 12 design variants. All variants show a fairly uniform distribution of velocities over the cross sections. Losses are comparatively low in all variants, somewhat 2

Card 1/2

L 26505-66

ACC NR: AT6008147 O

lower for the design with a diagonally disposed entrance. Hints for efficient compressor intake design are discussed, among them the necessity to have adequate overall axial dimensions so as not to increase unduly the curvature at flow bends. Model tests have indicated a sufficiently close correspondence of the flow rotation angles and velocity distributions with the full scale data. Orig. art. has: 4 figures, 1 formula.

SUB CODE: 13/ SUBM DATE: 01Sep64

Card 2/2 CC/

KUSYURINA, L.A.

Producing mutants of mold fungi by the use of ultraviolet rays. Report No2: Morphological characteristics of variants of Aspergillus nidulans produced through irradiation with various doses of ultraviolet rays. Mikrobiologiia 28 no.5:667-674 S-O '59. (MIRA 13:2)

1. Institut mikrobiologii AN SSSR.
(ASPERGILLUS radiation eff.)
(ULTRAVIOLET RAYS eff.)

L 22372-66 EWP(e) IJP(c) AT/WH
ACC NR: AP6009605 SOURCE CODE: PO/0045/65/028/004/0491/0497

AUTHOR: Sujak, B.; Kusz, J.

ORG: Laboratory for Induced Electron Emission, Institute of Experimental Physics, Wroclaw University; Department of Experimental Physics, Pedagogical College of Opole

TITLE: Field-excited (exo)electron emission from Rochelle salt crystals

SOURCE: Acta physica polonica, v. 28, no. 4, 1965, 491-497

TOPIC TAGS: electron emission, barium titanate, Rochelle salt, electron polarization, surface ionization

ABSTRACT: (Exo)electron emission excited by an externally applied electric field was found to occur from crystalline Rochelle salt specimens and from ceramic samples of the type of barium titanate. Subsequent to polarization in a sufficiently intense electric field, a Rochelle salt specimen becomes a source of exoelectrons without requiring light stimulation. The lowest polarizing voltage U_p at which exoelectrons begin to be recorded definitely depends on the crystallographical plane parallel to which the specimen has been cut. U_p is lowest in specimens cut parallel to the plane (100). Its value, as

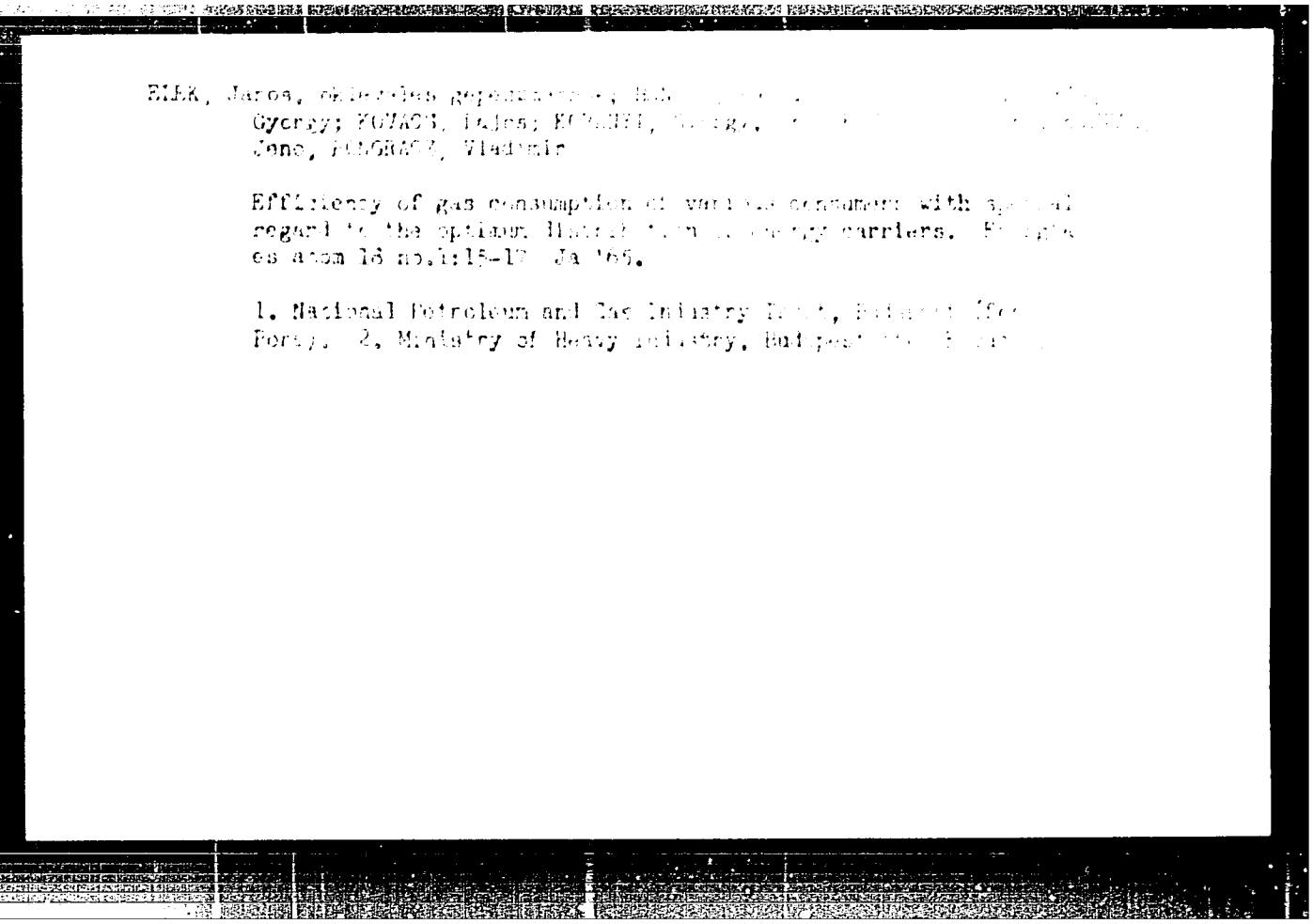
Card 1/2

L 22372-66
ACC NR: AP6009605

well as the variations in the recorded intensity of exoelectron emission, depend markedly on the previous history of the specimen. The results make it highly plausible that this "emission" is due to surface ionization of the gas wherein the sample is immersed. Orig. art. has: 5 figures and 3 formulas. [Based on author's abstract] [KS]

SUB CODE: 20/ SUBM DATE: 09Mar65/ ORIG REF: 002/
SOV REF: 002/ OTH REF: 001

Card 2/2 dda



S/044/62/000/006/049/127
B156/B112

AUTHORS: Zelazny, R., Kunzel, A., Mika, J.

TITLE: Solution of the one-velocity Boltzmann equation with first-order anisotropic scattering of neutrons in plane geometry

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 96, abstract 6B406 ([Referat.] Inst. badań jadrow. PAN, v. 9, no. 216, 1961)

TEXT: The Keys method of solving one-velocity transfer equations is applied to the case of anisotropic scattering. The case of a linear scattering indicatrix is examined in detail. The solution if sought by separating the variables. To find the unknown functions, the parameters of the solution, a system of two singular integral equations is set up. Systems of orthogonal functions of an angular variable are studied in detail and used for solving the problem. In conclusion, an example of the solution to the problem of finding the reflection factor of a semispace is given. It is stated in this article that the algorithm developed here can also be applied to the case of a more complex scattering indicatrix. [Abstractor's note: Complete translation.]

Card 1/1

POLACZEK, Lucyna, mgr; KUSZCZAK, Halina; FISCHHOF, Kazimiera

Method of determining ethyl flavono-7-hydroxyacetate and some possible impurities from its synthesis. Chem anal 9 no.2: 275-281 '64.

1. Zaklad Analityczny, Instytut Farmaceutyczny, Warszawa.

KUSZELEWSKI, Leszek

Studies on the use of manure. Pt. 3. Rocz nauk roln rosl 87 no.2:251-287 '63.

1. Katedra Chemii Rolniczej, Szkola Glowna Gospodarstwa Wiejskiego, Warszawa.

KUSZELEWSKI, Leszek

Studies on manuring. Pt. 4. Rocz nauk roln rosl 86 no.4:543-572 '62.

1. Katedra Chemii Rolniczej, Szkola Glowna Gospodarstwa Wiejskiego, Warszawa.

KUSZELEWSKI, Leszek

Studies on manure application. Pt.2. The influence of the methods of application of manure in the cultivation of potatoes. Rocz nauk roln rosl 81 no.3:577-619 '60. (EEAI 9:10)

1. Zaklad Chemii Rolniczej Szkoly Glownej Gospodarstwa Wiejskiego w Warszawie. Kierownik: Prof. dr. M.Gorski.
(Poland--Fertilizers and manures)
(Poland--Potatoes)

KUSZELEWSKI, Leszek; PENTKOWSKI, Andrzej

Properties of manure submitted to methane fermentation in the light of pot tests. Rocz nauk roln rosl 82 no.3:715-737 '61.

1. Katedra Chemii Rolniczej, Szkola Glowna Gospodarstwa Wiejskiego, Warszawa i Pracownia Metodyczno-Nawozowa, Instytut Uprawy, Nawozenia i Gleboznawstwa, Warszawa; Kierownik: prof. dr. M. Gorski.

27319
P/046/60/005/011/008/018
D249/D303

24.1000

AUTHORS: Kuszell, Antoni, and Mika, Janusz

TITLE: Thermal utilization factor for a water-graphite moderated lattice

PERIODICAL: Nukleonika, v. 5, no. 11, 1960, 743 - 754

X

TEXT: One- and two-group calculation methods of the thermal utilization factor for a heterogeneous reactor are discussed and compared. The standard two-group method is presented in a modified form by considering a non-zero neutron current at the boundary of the cell. The purpose of the work was to investigate a reactor design with a specified fuel element goemetry. The problem was approached by introducing a simplified geometry of the fuel element and treating it as a homogeneous system using the Seitz-Wigner method. The one-group theory expression for the thermal utilization factor is shown for the case of cylindrical symmetry of the cell. It is pointed out that in order to avoid difficulties of evaluating the

Card 1/5

Thermal utilization factor ...

different thermal source densities of thefuel and of the moderator, one can assume the fast neutron flux as constant throughout the cell. Under this assumption it is possible to evaluate the ratio of the slowing-down powers of the fuel and moderator in terms of their known neutron scattering properties. The equations of the two-group theory are presented for cylindrical symmetry and a solution is given for a system with infinite number of identical cells. By assuming the multiplication constant K a variable parameter, the thermal utilization factor for a system of finite number of cells is obtained. It is stated, that the calculations considered so far imply an assumption of a zero neutron flux at the boundary of the cell. The authors present a calculation method based on assumption of a finite flux, and express the thermal factor in terms of a single-parameter. The latter is evaluated by means of the semi-empirical Gurevich-Pomeranchuk formula (Ref. 5: A.D. Galanin, Teoriya yadernykh reaktorov na teplovykh neutronakh, Moskva (Theory of Thermal Neutron Nuclear Reactors, Moscow), 1957) and Deutsch's formula (Ref. 3: Reactor Physics Constants, ANL 5800). Finally the

Card 2/5

Thermal utilization factor ...

two-group theory is improved by including the age-diffusion corrections. Numerical calculations were performed for RFT fuel elements consisting of six concentric tubes of aluminum and uranium oxide (U^{235} 90 % enriched) ceramics cl. !ded with aluminum, the whole surrounded by graphite, (Fig. 1) and water as coolant flowing through the space between the tubes. At the center of the element, there is an experimental channel filled with air. The results are presented in Table 2. In conclusion the authors remark that the remarkable consistency of the results obtained by different methods is implied by the characteristic properties of the system considered, and more significant deviations should be expected for a system with a more strongly absorbing moderator and with a smaller ratio of volumes of the fuel and the moderator, i.e. for smaller values of the thermal utilization coefficient f. There are 2 figures, 2 tables, and 6 references: 1 Soviet-bloc and 5 non-Soviet -bloc. The 4 most recent references to the English-language publications read as follows: A.C. Clark, D.A. Newmarch, AERE RP/R, 1657; Reactor Physics Constants. ANL 5800; R.L. Murray, Nuclear

Card 3/5

Thermal utilization factor ...

Reactor Physics. Prentice Hall, 1957; H. Ritz, "Nucleonik" 1, no. 5, 175, 1959.

SUBMITTED: September, 1960

Fig. 1.

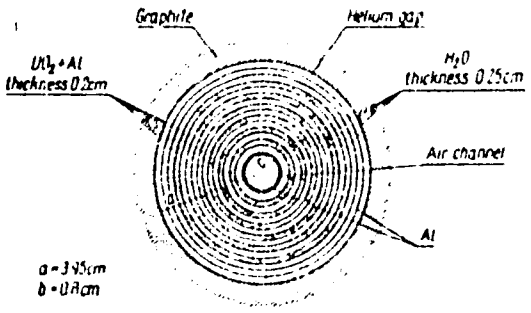


Fig. 1 Fuel element

Card 4/5

ZELAZNY, R.; KUSZELL, A.

Milne's problem for two adjacent half spaces. Bul Ac Pol mat 9 no.3:217-220 '61.

1. Institute of Nuclear Research, Polish Academy of Sciences, Warsaw, and Institute of Theoretical Physics, University, Warsaw. Presented by L. Infeld.

ZELAZNY, R.; KUSZELL, A.

Milne's problem for two adjacent half spaces. Bul Ac Pol mat 9 no.3:219-220 '61.

1. Institute for Nuclear Research, Polish Academy of Sciences and Institute of Theoretical Physics, Warsaw University. Presented by L. Infeld.

(Spaces, Generalized)

S/044/62/000/006/048/127
B156/B112

24.6500

AUTHORS: Zelazny, R., Kuszell, A.

TITLE: A special model of a two-group approach in neutron transport theory

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 96, abstract 6B404 (Bull. Acad. polon. sci. Sér. sci. math., astron. et phys., v. 9, no. 6, 1961, 461-466)

TEXT: A method is proposed for solving the equation for neutron transfer, which is confined to the two-group method. It is assumed that the free path lengths do not depend on the number of the group. A solution to the problem is sought using a Fourier transformation of a geometrical variable. The result is to reduce the problem to solving a system of integral equations for functions depending only on an angular component. When a system of eigenfunctions has been found, the solution to the problem is written in the form of a Neumann series. Various applications of the method are discussed, the most interesting of them being the results of solving the Milne problem in a two-group approximation and of solving the

Card 1/2

B/044/62/000/006/048/127
A special model of a two-group ... B156/B112

problem of the critical dimensions of a reactor in the form of an infinite layer. [Abstracter's note: Complete translation.]

/B.

Card 2/2

KUSZELL, A.

The critical problems for multilayer slab systems. Acta physica Pol 20 no.7:567-589 '61.

1. Institute of Nuclear Research, Polish Academy of Sciences, Warsaw.

KUSZER, P.

Clinical aspects and pathology of polyradiculitis. P. Kuszer (Wien. med. Wschr., 1954, 103: 241–244). A review with 5 case reports and 10 references. W. R. Hall

BILOWICKA, Maria; LIBISZOWSKA-STANIUL, Maria; KUSZEWSKI, Bogdan; SZELEZYNSKI, Kazimierz

Combined treatment of pulmonary tuberculosis with streptomycin and isoniazid. Gruzlica 24 no.1:41-47 Jan 56.

1. Z Kliniki Ftyzjatrycznej Akademii Medycznej w Gdansku Kierownik: prof. dr. M. Telatycki, Praca zlecona przez Instytut Gruzlicy, Gdansk, ul. Debinki 7 a. Klinika Ftyzjatryczna.

(TUBERCULOSIS, PULMONARY, ther.
streptomycin & isoniazid.)
(STREPTOMYCIN, ther. use
tuberc., pulm., with isoniazid.)
(NICOTINIC ACID ISOMERS, ther. use
isoniazid in pulm. tuberc., with streptomycin.)

KUSZELEWICZ, Bohdan; PAWŁOWSKI, Jan

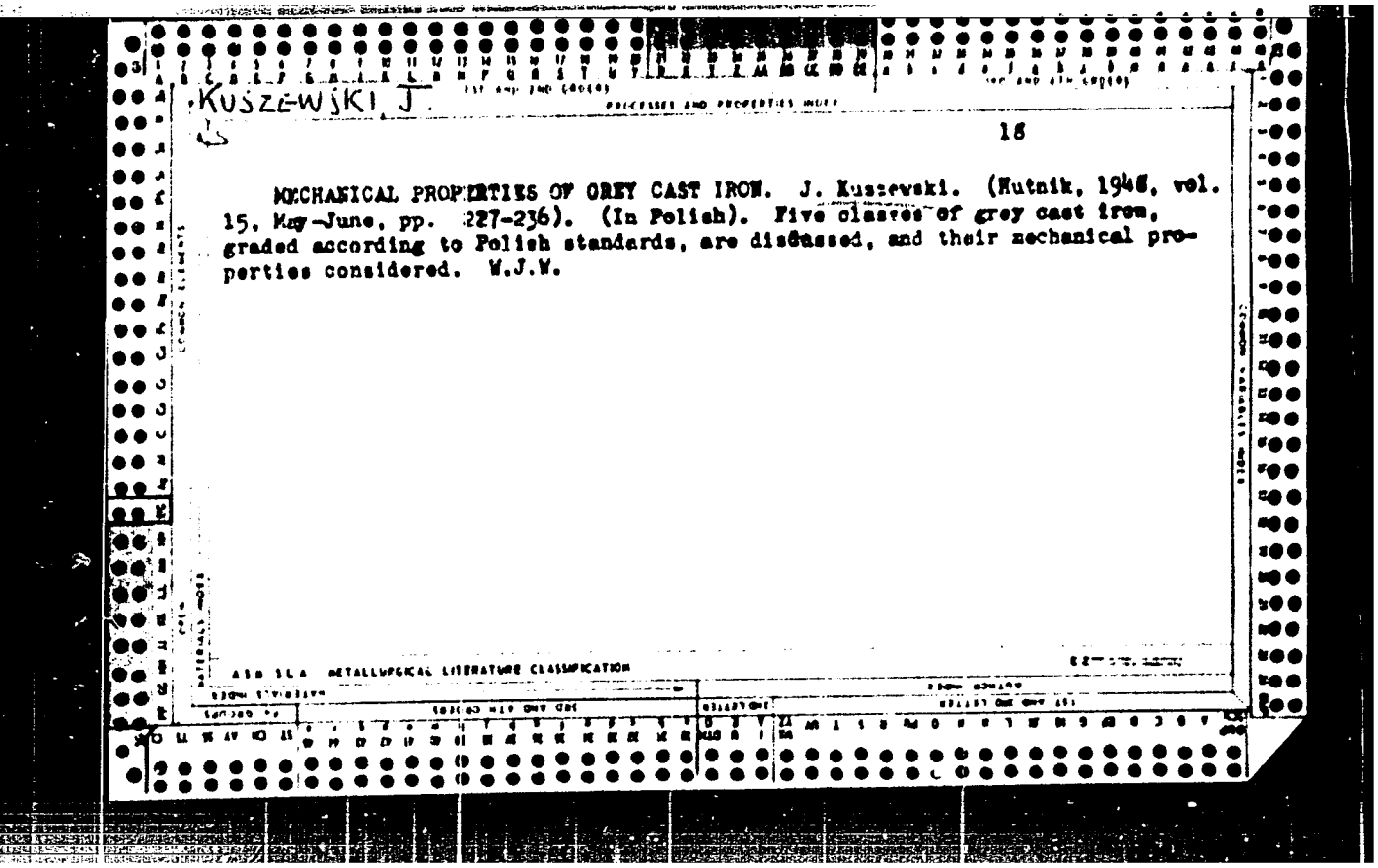
Studies on pulmonary sclerosing [illegible] Gruzlica 32 no.8:695-701 Ag '64.

1. Z Kliniki Gruźlicy Płuc Akademii Medycznej w Gdańsku Kierownik: prof. dr. med. L. Kleinrowski i z Wojewódzkiego Szpitala Przeciwgruźliczego w Gdańsku Ordynator: dr. med. B. Pawłowski.

KUSZEWSKI, D. - Rolnik Spoldzielca. Vol 8, no 27, July 1955 - Warszawa

Peace and collabration p. 1.

SO: Monthly list of East European Accessions List, (EWAL), LC, Vol. 4, No.11 Nov 1955, Uncl.



KUSZEWSKI, J.

18

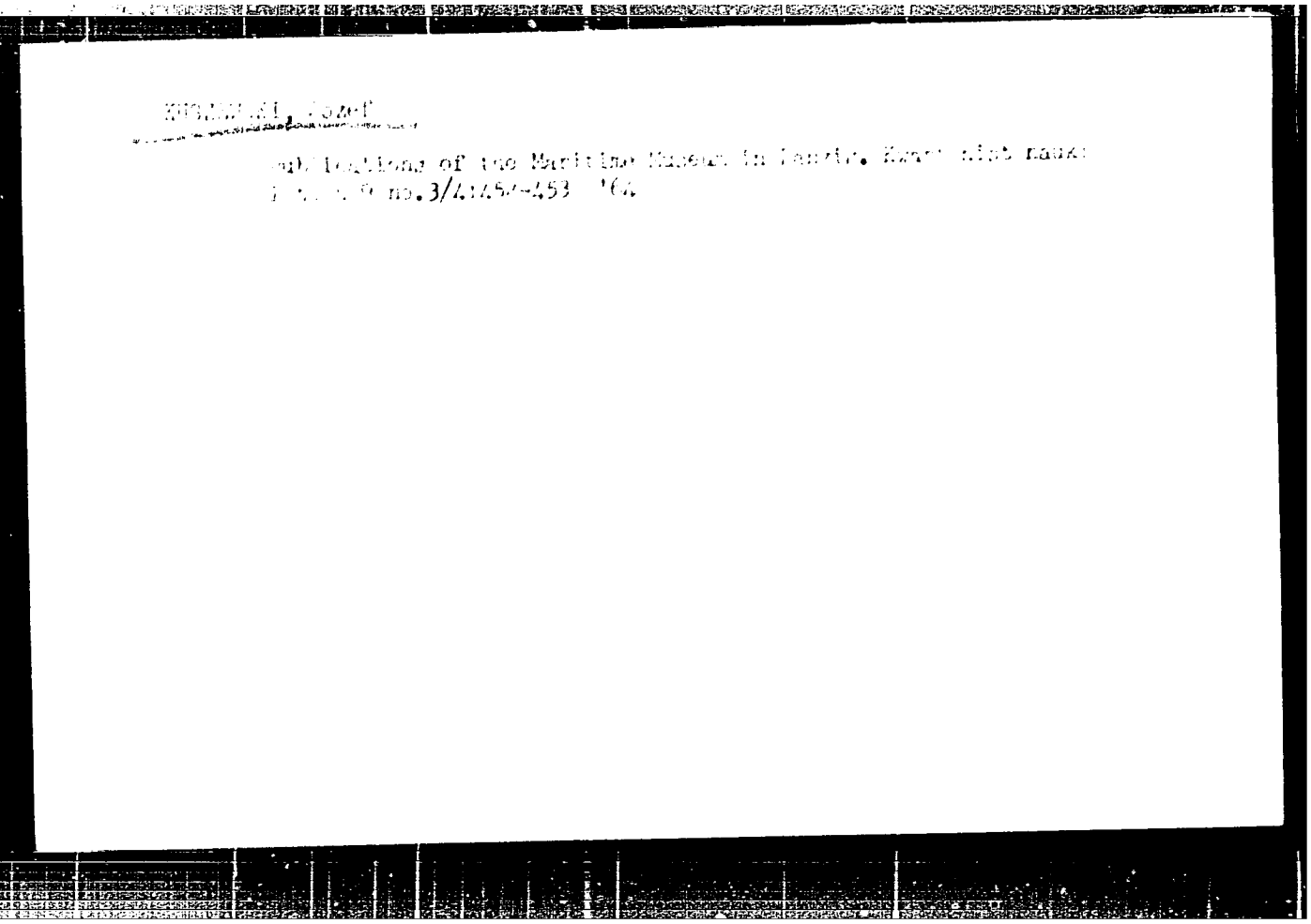
MECHANICAL PROPERTIES OF GREY CAST IRON. J. Kuszewski. (Hutnik, 1948, vol. 15, May-June, pp. 227-236). (In Polish). Five classes of grey cast iron, graded according to Polish standards, are discussed, and their mechanical properties considered. W.J.W.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

KUSZEWSKI, J.

"Structure and mechanical properties of cast iron in the light of modern structural diagrams," Przeglad Odlewnictwa, Krakow, Vol 4, No 7/8, July/Aug. 1954, p. 205.

SO: Eastern European Accessions List, Vol 3, No 11, Nov 1954, L.C.



KUSZEWSKI, Jozef

The Shipbuilding in Poland During the Years 1945-1962
Exhibition arranged in the Maritime Museum in Danzig.
Kwart hist nauki i tech 8 no.3:468-470 '63.

KUSZEWSKI, Józef

6601* Casting of Iron Alloys in Permanent Molds. Odlewanie stopów żelaza do form trwałych. (Polish.) Józef Kuszewski. *Przegląd Odlewnictwa*, v. 6, no. 2, Feb. 1956, p. [illegible].
Preparation and design of cast-iron molds. Casting techniques and pouring set-up, including sprue and gate design. Foundry costs. Cast-iron vs. steel molds, and service life in relation to weight of castings. Diagrams, table.

LFH

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910009-4"

KUSZEWSKI, Zbigniew, inz.

The Oder River during the period 1946-1961. Gosp wodna 22 no.6:243-244 Je '62.

1. Towarzystwo Rozwoju Ziem Zachodnich, Warszawa.

KUSZTMAN, M.Sz. [Kusil'man M.S.]

Tasks of the national as well as industrial standardization in the machine industry. Szabvany kozl 13 no.5:112-113 My '61.

KUSZKA, Werner; NOWAK, Jan

Obtention of naphtalene of the pressed type by the centrifugation method. Koks smola gaz 6 no.6:211-214 '61.

1. Zaklady Koksochemiczne, Hajduki

DEKO, Zenon, mgr inz.; KUSZKE, Hubert, mgr inz.

Automatic constant-voltage controlling device for electrostatic precipitators. Energetyka Pol 17 no.11;Suppl.:Energopomiar 9 no.6:37-42 N '63.

1. Pion Elektryczny, Zaklad Badan i Pomiarow, Warszawa.

KAHL, Władysław; KUSZLIK-JOZWIK, Krystyna

N-glycosides of the sodium salt of sulfanilic acid. Rocz chemii 38 no. 1:17-21 '64.

1. Department of Organic Chemistry, School of Medicine, Krakow, Division of Pharmacy.

3661

S/081/62/000/009/069/075
B160/B101

157140

AUTHORS: Proszt, János, Kuszmann, Jánosné, Lipovetz, Iván, Nagy, József

TITLE: Method of making silicone-based heat-resistant and anti-corrosion varnishes

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 633, abstract 9P327 (Eljárás szilikon alapú hőálló szigetelő és korrózióvédő lakkok előállítására. Hungarian patent 147714, October 15, 1960)

TEXT: Silicone resin for heat-resistant and anti-corrosion varnishes can be made from polyorgano-siloxane having an R:Si ratio of 1-1.5 and a degree of polycondensation of 10-100, which has been produced from alkyl-, aryl- or alkyl-aryl alkoxysilane by total hydrolysis in the presence of water and p-toluene-sulfo acid (I). The resin is obtained by the interaction of this with a modified polyalkoxy-oligo-organosiloxane having the general formula $RO-SiR_1R_2-O\left[-SiR_1R_2-O\right]_n-SiR_1R_2-OR$, where R is an alkyl radical with 1-2 atoms of C whilst R_1 and R_2 are saturated or unsaturated hydrocarbon or

Card 1/3

S/081/62/000/009/069/079
B160/B101

...ethod of making silicone-based...

...henyl radicals, n = 2-4 . (This organosiloxane is obtained by condensation of ...,...-dialkoxy-oligo-dialkyl- or dialkoxy-oligo-alkyl-arylsiloxane with esters of fatty acids containing free hydroxyl groups, 1-5% dicarboxylic acids or their anhydrides being added afterwards to the condensate). Examples: A. Production of silicone resin. (II) 60 g of water are stirred into a mixture of 350 g phenyltriethoxysilane and 1 g I for 3 hours and boiled for 2 hours. After the alcohols have been driven off, the reaction mixture is dissolved in toluene and any remaining traces of alcohols are removed; the condensation is then continued in a Marcusson apparatus for 3-4 hours while the reaction mixture is boiled in the presence of 3-4 g of zinc stearate. B. Production of silicone plasticizer (III). a) While a mixture of 148 g of dimethyldiethoxysilane with 0.5 g of I is being heated in a water bath for 3 hours, 9 g of water are added; the mixture is kept heated for a further 2 hours and the alcohol driven off. Tetramethyl-diethoxy-disiloxane is obtained. b) A mixture of 44 g of glycerol, 64 g of castor oil and 0.1 g of lead oxide is heated to 250°C in a stream of nitrogen to form a homogeneous mixture. c) The products obtained from (a) and (b) are reacted together and the alcohol driven off in a stream of nitrogen, the temperature being raised from 100 to 200°C in 3 hours. The oily

Card 2/3

reaction mixture so formed is heated to 230°C; 10.6 g of phthalic anhydride are added slowly and the temperature is raised to 240-250°C. After cooling, the product is dissolved in toluene. C. Condensation of II and III is carried out while boiling the toluene. The toluene solution of the varnish is filtered and evaporated to a resin content of 40%. 600-700 ml of a 40% solution of resin is obtained. [Abstracter's note: Complete translation.]

Card 3/3

VARGHA, L.; TOLDY, L.; FERER, O.; HORVATH, T.; KASZTNER, L.; KUSZMANN, J.; LENDVAI, Sarolta

New sugar derivatives with cytostatic effectiveness. Acta physiol. hung. 19 no.1-4:305-312 '61.

1. Forschunginstitut fur die pharmazeutische industrie, Budapest.
(CARBOHYDRATES pharmacology)
(ANTINEOPLASTIC AGENTS pharmacology)

KUSMANN, Karoly; VINCZE, Endre, dr.

Conditions for practical application of clamping devices for milling machines. Gep 16 no.8:303-311 Ag '64.

1. Diosgyor Machine Factory, Miskolc (for Kusmann). 2. Chair of Mathematics, Technical University of Heavy Industry, Miskolc (for Vincze).

POLAND / Chemical Technology. Processing of Solid Fossil Fuels. H-22

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 78993.

Author : Kuszniariewicz, N. R.
Inst : Not given.
Title : The Experiments in Preparing Shaped Metallurgical Coke on a Pilot Plant Scale in the USSR.

Orig Pub: Koks, smola, gaz, 1957, 2, No 6, 294-299.

Abstract: Methods of preparation, design of a pilot plant unit and experimental results concerning the preparation of metallurgical coke from weakly coking coals are described. The original coal passes through a breaker, a buffer collector, a worm conveyer over for fast heating to a temperature of plasticity, a cyclon for the separation from the vapor phase, buffer capacity, a

Card 1/2

POLAND / Chemical Technology. Processing of Solid Fossil Fuels. H-22

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 78993.

Abstract: compressor and an oven for the thermal treatment of the briquets obtained. Data is furnished on physical-mechanical properties of the prepared coke as well as data on the characteristic of the resulting liquid and gaseous products.

Card 2/2

KUSZTOS, Denes, dr.; KELLER, Laszlo, dr.

Rheography. Orv.hetil. 102 no.6:251-254 5 F'61.

1. Fovarosi Istvan Korhaz, I. Belosztaly.
(HEART physiol)
(BRAIN physiol)

KUSZTOS, Denes, dr.; SARKOZY, Katalin, dr.; VARNAI, Gyorgy, dr.

Amputation of patients with vascular diseases with special reference to surgical risks. Orv.hetil. 102 no.10:454-456 5 Mr '61.

1. Fovarosi Istvan Korhaz, I. Belosztaly.
(AMPUTATION)
(VASCULAR DISEASES PERIPHERAL surg)

KELLER, Laszlo, dr.; KUSZTOS, Denes, dr.

Regression in diabetes mellitus caused by cerebrovascular insultus.
Orv. hetil. 102 no.19:896-898 7 My '61.

1. Fovarosi Istvan Korhaz, I Belosztaly, Budapest.

(DIABETES MELLITUS) (CEREBRAL HEMORRHAGE)

BODROGI, Gy.; KALMAN, P.; KUSZTOS, D.

On the role of rheocardiography in the determination of single heart phases. Acta med. Hung. 18 no.2:189-196 '62.

1. Staatliches Kardiologisches Institut, IV. Medizinische Klinik der Medizinischen Universitat, und I. Innere Abteilung des Istvan-Krankhenhauses, Budapest.
(ELECTROCARDIOGRAPHY)

SZEPLAKI, Sandor, dr.; KUSZTOS, Denes, dr.

Data on the occurrence and pathomechanisms of cor pulmonale and chronic bronchopulmonary disorders according to clinical examination. Orv. hetil. 103 no.29:1349-1354 22 Jl '62.

1. Fovarosi V. ker. Szkorvosi Rendelo (Rosenberg hp. u.) EKG. es Istvan Korhaz, I. Belosztaly.
(PULMONARY HEART DISEASE statist) (LUNG DISEASES statist)

KUSZTOS, Denes, dr.; KELLER, Laszlo, dr. FOHO, Jozsef, dr.

Rheographic examination of the effect of syncardial massage.
Orv. hetil. 105 no.12:550-553 22 Mr'64.

1. Fovarosi Istvan Korhaz, I.Belosztaly.

*

KUSZTOS, Denes, dr.; HAFFNER, Zsolt, dr.

Use of Peripherin-Homburg in circulatory diseases of the brain.
Orv. hetil. 105 no.21:991-993 24 My'64

1. Istvan Korhaz, I. Belosztaly es Idegosztaly.

*

BUGAR-MESZAROS, Karoly, dr.; KUSZTOS, Denes, dr.

Our therapeutic results with the Syncardon machine. Orv. hetil. 105 no.52:2467-2470 27 D '64.

1. Foveros: Istvan Korhaz I. Belosztaly (foorvos: Bugar-Meszaros Karly dr.).

ELEK, Jaros, [illegible]; KOVACS, Lajos, [illegible]; Jono, HUNGARO, Vladimir

Efficiency of gas consumption at various consumers with special regard to the optimum distribution ... energy carriers. Energia es atom 18 no.1:15-17 Ja '66.

1. National Petroleum and Gas Industry Trust, Budapest (for Elek). 2. Ministry of Heavy Industry, Budapest (for [illegible])

KUSZYNSKI, Wieńczsław; GIEWICZ, Janusz

Swelling kinetics of brown coal and peat in pyridine. Mat chemia no.6:26-33 '62.

1. Katedra Technologii Chemicznej, Uniwersytet im. Adama Michiewicza, Poznań.

KUT, Karel

Testing the [illegible] of [illegible] the A[illegible] for [illegible] for the revision of the [illegible] maps. [illegible] 10 no.[illegible] D [illegible].

1. Institute of Geodesy and [illegible], Prague.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910009-4"

KUTA, A.

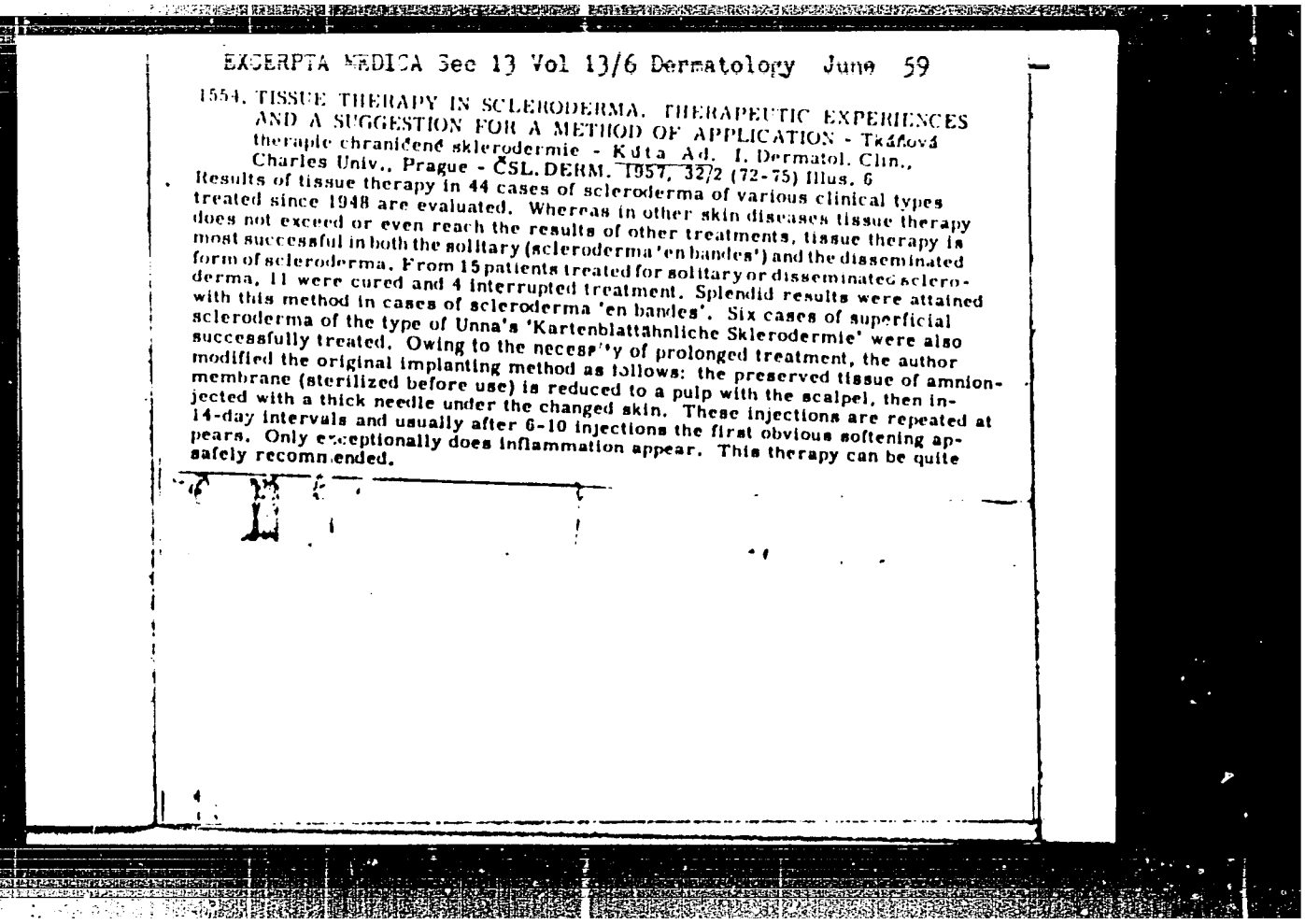
Occupational factor in cutaneous cancer. Bratisl. lek. listy 32 no. 3-4:189-192 1952. (CLML 24:1)

1. Of the First Dermatological Clinic of Charles University, Prague.

BLAZEK,J., MUDr; CERNY, E., MUDr; KUTA, Adolf, MUDr, asistenti kliniky

Porokeratosis of Mibelli. Cesk.derm. 31 no.4:185-189 Aug 56.

1. Z I. dermatov. kliniky KU (predn. prof. MUDr Karel Gawalowski)
(KERATOSIS, case reports
porokeratosis of Mibelli (Cz))



EXCERPTA MEDICA Sec 13 Vol 13/6 Dermatology June 59

1554. TISSUE THERAPY IN SCLERODERMA. THERAPEUTIC EXPERIENCES AND A SUGGESTION FOR A METHOD OF APPLICATION - Tkáňová therapie chranidené sklerodermie - Kuta Ad. I. Dermatol. Clin., Charles Univ., Prague - ČSL. DERM. 1957, 32/2 (72-75) Illus. 6

Results of tissue therapy in 44 cases of scleroderma of various clinical types treated since 1948 are evaluated. Whereas in other skin diseases tissue therapy does not exceed or even reach the results of other treatments, tissue therapy is most successful in both the solitary (scleroderma 'en bandes') and the disseminated form of scleroderma. From 15 patients treated for solitary or disseminated scleroderma, 11 were cured and 4 interrupted treatment. Splendid results were attained with this method in cases of scleroderma 'en bandes'. Six cases of superficial scleroderma of the type of Unna's 'Kartenblattähnliche Sklerodermie' were also successfully treated. Owing to the necessity of prolonged treatment, the author modified the original implanting method as follows: the preserved tissue of amnion-membrane (sterilized before use) is reduced to a pulp with the scalpel, then injected with a thick needle under the changed skin. These injections are repeated at 14-day intervals and usually after 6-10 injections the first obvious softening appears. Only exceptionally does inflammation appear. This therapy can be quite safely recommended.

EXCERPTA MEDICA Sec.13 Vol.12/4 Derma/Venereology Apr58

695. KOEBNER'S PHENOMENON IN A STUDY CONCERNING THE PRIMARY EPIDERMAL PATHOGENESIS OF PSORIASIS - Kúta A. and Neumann E. Dermato-Venereol. Clin. of Charles Univ., Prague - DERMATOLOGICA (Basel) 1957, 115/1 (51-60) Illus. 6

The authors support the view that, in the pathogenesis of psoriasis, an increased regenerative activity of the epidermis cells is the primary and determining process. To prove this conception, they have tried to demonstrate such processes in the epidermis at a time when no changes can be seen in the corium. They have used for this purpose, on the principle of Koebner's phenomenon, the mechanical stimulus of a scratch on a piece of skin, then excised the piece before the appearance of any manifest symptoms, and tested it for dehydrogenase activity, which is known in general to accompany proliferative processes. This activity was in fact seen to be significantly increased in the epidermis of psoriatic patients compared with that of control persons.

2009. KUTA A. I. Dermatol. Klin., Karls Univ., Prag. *Pellagra acuta. Acute pellagra DERMATOL. WSCHR. 1957, 135/2 (25-28) Illus. 2

Eight cases of acute pellagra, which were observed in North Korea are briefly described. Because of the highly insufficient nutrition, especially in respect of proteins, minerals and vitamin (niazin), the conclusion is reached that the conditions for the development of pellagrous deficiency photosensitization were present. The acuity of the development and of the phenomena was striking. The quick result of vitamin therapy also suggests acute pellagra, in which gastrointestinal disturbances and symptoms are either of secondary importance or absent.

(XIII, 6*)

1140. ROLE OF THE SKIN ADNEXAE IN THE PATHOGENESIS OF PSORIASIS - Neumann E. and Kůta A. First Dermato-Venereol. Clin., Charles Univ., Prague - DERMATOLOGICA (Basel) 1958, 116/6 (400-408) Illus. 7

A constant, strongly positive dehydrogenase reaction in the skin adnexae, and particularly in the hair follicles and their ostia opening into the epidermis, suggests a high regenerative and functional activity in this apparatus. In pursuance of their previous findings, that psoriasis is a primary epidermal hyperregenerative process, and that it occurs chiefly in regions of a physiologically high regeneration of the epidermal cells, the authors histologically studied initial lesions in different clinical forms of psoriasis, with special regard to the follicular apparatus and to the adnexae in general. Microscopy conclusively showed that the psoriatic process in the epidermis develops from the ostia of the follicles and possibly also of the sweat glands, whereas changes of a simple hyperregenerative nature occur even in the hair follicle proper. In the light of this finding, the authors attempt to explain a series of clinical features of the psoriatic process.

KUTA, Adolf

Mibelli's porokeratosis zoniformis. Report of 3 cases and etiopathogenic analysis. Cesk. derm. 34 no.2/3:122-130 Ap '59.

1. I dermatovenerologicka klinika KU, prednosta prof. dr. K. Gewalowski.

(SKIN dis)

KUTA, A.

Lichen ruber planо-pilaris decalvans, reso. debarbans. Contribution to its nosology and therapy and considerations on pseudopelade. Sborn.lek.62 no.11:315-330 N'60.

1. I. dermatologicka klinika fakulty vseobecneho lekarstvi Karlovy University v Praze, prednosta prof.dr. K. Gawalowski.
(LICHEN PLANUS compl)
(ALOPECIA etiol)

KUTA, A.

Carcinomatosis cutis teleangiectatica secundaria. Sborn.lek.62 no.11:324-326 N'60.

1. I. dermatovenerologicka klinika fakulty vseobecneho lekarstvi university Karlovy v Praze, prednosta prof.dr. K.Gawalowski.
(SKIN NEOPLASMS case reports)
(CARCINOMA case reports)

KUTA, Adolf

Peroral antidiabetic Tobucin-SPOFA in the treatment of juvenile verruca plana. Cesk. derm. 36 no.6:396-400 '61.

1. I dermatovenerologicka klinika University Karlovy v Praze, prednosta prof. dr. J. Konopik, Dr. Sc.

(PAPILLOMA ther) (ANTIDIABETICS ther)

ERBAK, V.; JILEK, M.; KUTA, Ad.

2 cases of Mibelli's poroketosis (Case report contribution with an etiopathogenetic analysis). Cesk. derm. 36 no.1:51-54 F '62.

1. Dermato-venerologicke oddelenie OUNZ v Rimavskej Sobote, prednosta prim. dr. V. Erbak I. dermato-venerologicka klinika University Karlovy v Praze, prednosta prof. dr. K. Gawalowski.
(SKIN diseases)

KUTA, A.

Our experience with surgical therapy of rhinophyma. Cesk. derm. 37 no.4:276-277 Ag '62.

1. I. dermato-venerologicka klinika fakulty vseobecneho lekarstvi University Karlovy, prednosta prof. dr. J. Konopik, DrSc.
(ROSACEA surg)

KUTA, Adolf

A contribution to the problem of malignant melanoblastoma.
Sborn. lek. 44 no.2:46-56 F '62.

1. I dermatovenerologicka klinika fakulty vseobecneho lekarstvi
University Karlovy v Praze, prednosta prof. DrSc. MUDr. J. Konopik.
(MELANOMA pathol.)

KUTA, Adolf

Therapeutic problems in cutaneous carcinoma from dermatologist's viewpoint. I. Cas. lek. cesk. 101 no.43:1273-1279 26 O '62.

1. I. dermatovenerologicka klinika fakulty vseobecneho lekarstvi KU v Praze, prednosta prof. dr. J. Konopik.
(SKIN NEOPLASMS)

KUTA, A.

Chronic roentgen dermatoses with multiple carcinomatous growths and skin sarcoma. Cesk. rentgen 17 no.2:116-123 Mr '63.

1. I. dermato-venerologicka klinika fakulty vseobecneho lekarstvi KU v Praze, prednosta prof. dr. J. Konopik, DrSc.
(RADIATION INJURY) (SKIN NEOPLASMS) (CARCINOMA EPIDERMOID)
(CARCINOMA BASAL CELL) (SARCOMA)

KUTA, A.

Chronic late roentgen dermatosis with cancerization after application of very soft (Bucky) roentgen rays. Cesk. rentgen. 17 no.4:273-279 Jl '63.

1. I dermato-venerologicka klinika fakulty vseobecneho lekarstvi KU v Praze, prednosta prof. dr. J. Konopik, DrSc.
(RADIATION INJURY) (DERMATITIS)
(SKIN NEOPLASMS) (ACNE) (CARCINOMA, BASAL CELL)

JILEK,M.; KUTA,A.

Werner's syndrome. Clinical comparisons in histological picture of skin changes. Sborn. lek. 66 no.2:55-60 F'64.

1. I.dermato-venerologicka klinika fakulty vseobecneho lekarstvi University Karlovy v Praze; prednosta: prof.dr. J.Konopik, DrSc.

KUTA, A.

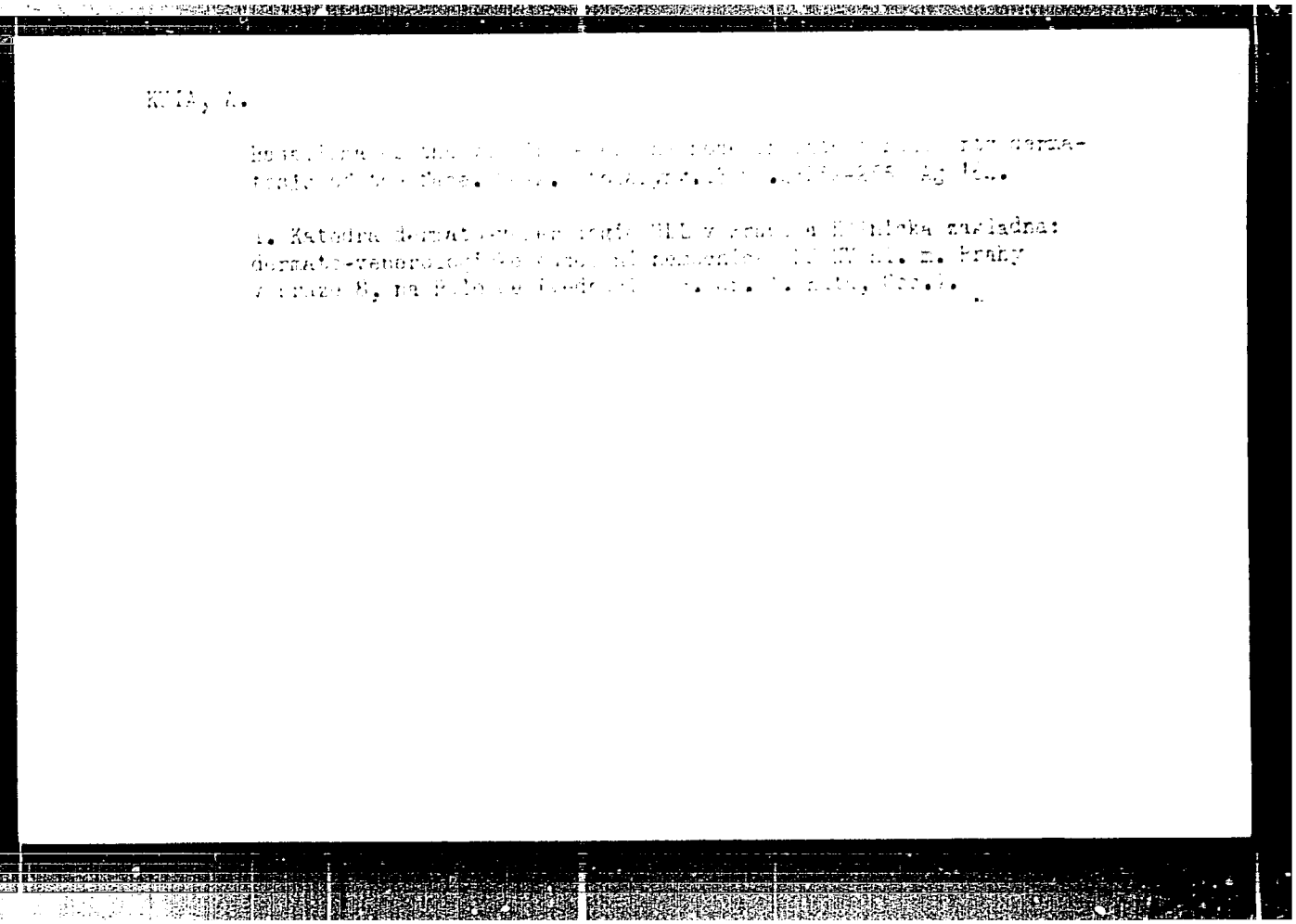
Etiopathogenesis of psoriasis vulgaris in the light of its simple manifestations. Cesk. derm. 29 no.3:193-199 My '54.

1. I. dermato-venerologicka klinika fakulty vseobecneho lekarstvi KU [Karlovy university] v Praze; prednosta: prof. dr. J. Konopik, DrSc.

KUTA, A.

Therapeutic problems in skin carcinoma from the viewpoint of the dermatologist. Cas. Lek. Cesk. 103 no.17:4[illegible]-47[illegible] [illegible] 24 '64.

1. I. dermato-venerologicka klinika fakulty vseobecneho lekarstvi KU [Karlova Universita] v Praze (prednosta: prof. dr. [illegible], DrSc.).



KUTA, A.

Some remarks on further educational aims of the department of dermatology and venerology of the Medical Institute for Graduate Studies. Cesk. derm. 40 no.6:408-411 D '65.

1. Katedra dermato-venerologie UDL v Praze (vedouci doc. dr. A. Kuta, CSc.).

KUBA, F.

Relation between the production of agricultural machinery and agriculture from the point of view of research.

p. 43 (Zemedelske Stroje) Vol 2, no 2, Feb. 1957 Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 1, Jan. 1958

KUTA,I.; EISELT, E., MUDr.; BOJANOVSKY, I.; BOSAK,V.

Sport efficiency and strength in the aged. Cas. lek. cesk. 104 no.13:351-356 2 Ap '65

1. Vyzkumny ustav telovychovny v Praze (reditel: MUDr. E.Eiselt).

KUTA, IA.; SMOLER, I.

Instantaneous polarographic currents. III. i-t curves of the diffusion current with a high concentration of amalgam-forming depolarizers. Coll Cz chem 26 no.1:224-229 Ja '61. (EEAI 10:9)

1. Poliarograficheskiy institut, Chekhoslovatskaya Akademiya nauk, Praga.

(Polarograph and polarography) (Diffusion)
(Depolarizers)

CZECHOSLOVAKIA

BRANICA, M; KUTA, J

1. Department of Physical Chemistry, "Ruder Boskovic" Institute, Zagreb, Yugoslavia - (for ?) 2: J.Heyrovsky Institute of Polarography, Czechoslovak Academy of Sciences, Prague - (for ?)

Prague, Collection of Czechoslovak Chemical Communications, No 7, July 1966, pp 2833-2840

"Polarographic study of reduction and disnutation of uranium in aqueous solutions of acetylacetone."

CA

1

Hydrogen overvoltage at the dropping-mercury electrode with constant drop time

24(2,4) PHASE I BOOK EXPLOITATION CZECH/2433

International Polarographic Congress. 1st, Prague, 1951

Sborník I. Mezinárodního polarografického sjezdu. Díl 3: Hlavní referaty přednesene na sjezdu. (Proceedings...Vol 3: Reviews Read at the Congress. Praha, Přírodovědecké vyd-ví [1952] 774 p. 2,000 copies printed.

Resp. Ed.: Jiří Koryta, Doctor; Chief Ed. of Publishing House: Milan Skalník, Doctor; Tech. Ed.: Oldřich Dunda.

PURPOSE: The book is intended for chemists, chemical engineers, and physicists.

COVERAGE: The book is a collection of reviews and original papers read at the International Polarographic Congress held in Prague in 1951. Uses of polarography in organic and inorganic analysis, biochemistry, medicine, and industrial chemistry are discussed. In the section, Reviews Read at the Congress, Russian and either German or English translations of each review are presented. In the section, Original Papers Read at the Congress, only those translations in Russian, German, and English which have not been published in Volume I are presented. The following scientists participated in the opening of the Congress: Professor Wiktor Kemula, Dean of the Faculty of Sciences, Warsaw; Doctor Jaromír Dolanský, Minister of Planning; Professor Jaroslav Heyrovský, Chairman of the Congress; and Professor Jaroslav Pikatko, Chairman of the Center for Scientific Research and Technical Development. References follow each paper.

Card 3/14

ORIGINAL PAPERS READ AT THE CONGRESS

KUTA, J., RIHA, J., NOVAK, J.

"Contribution to the Polarographic Determination of Manganese and Iron" p. 649, (CHEMICKE LISTY, Vol. 47, no. 5, May 1953, Praha, Czechoslovakia).

SO: Monthly List of East European Accessions, LC, Vol. 2, No. 11, Nov. 1953, Uncl.

The mechanism of hydrogen liberation at mercury electrodes. [illegible] Chem. Zvesti [illegible]. The mechanism of the liberation of H ions caused by the overvoltage of the [illegible] and dropping Hg electrodes was studied. The [illegible] ments of the overvoltage of H ions were accurate and reproducible on Hg electrodes, especially by the dropping Hg method which was essentially a polarographic method (I). New overvoltage laws such as the derivation of the logarithmic dependence of overvoltage on the Hg drop time and concn. of acid applied. Polarographic criterions for limiting currents showed by what processes the current was limited. In the case of fast reactions the current was limited by diffusion, but at const. potential it was proportional to $t_1^{1/6}$ (t_1 = Hg drop time) which corresponded to the diffusion current. If the current was limited by the rate of the reaction, it was proportional to $t_1^{1/3}$ and assocd. with the kinetic current. The limiting currents of the weak and irreducible acids behaved as diffusion currents. They decreased after the anions of these acids were added, and simultaneously the half-wave potentials shifted in a neg. direction. In the case of H_3BO_3, the current was of a kinetic nature. A possibility was the detn. from the polarographic data, of the consts. of dissocn. and recombination of weak irreducible acids. 50 references. Jan Mleln

KUTA, JAROSLAV

Polarographic behavior of boric acid. [illegible] (Polarographic Institute CSAV, Prague, [illegible]) (1961).—In 0.1M (CH3)4NI [illegible] −1.97 v. against a normal Hg pool electrode, which [illegible] times smaller than corresponded to the diffusion current of reduction of the acid. There was a kinetic current dependence, coeff. of which was only [illegible] per degree. Addition of polyalcs., e.g. of glycerol or sorbitol, the wave height increased and the half-wave potential was shifted to more positive values. With excess of glycerol, the current remained kinetic and had the same temp. dependence, while with excess of sorbitol the current became diffusional. The wave was ascribed to the reduction of H^+, which was formed by a relatively slow dissocn. which preceded the electrode process. E. Hrůza

KUTA, JAROSLAV

CZECH

Catalytic currents due to pyridine in unbuffered solutions. Jaroslav Kůta and Josef Drešek (Polarograf. ústav ČSAV, [redacted]). Listy 49, 21-27(1955). In soln. of pyridine (I) contg. 0.1N KCl and 10⁻³N HCl or a weak nonreducible acid of pK = 2.5, 2 waves were found at the potentials −1.53 and 1.8 v. (vs. N calomel electrode). The more pos. wave was of diffusional nature and was due to the reduction of H^+. In the presence of I this wave was shifted towards more pos. potentials and its shape changes were due to the catalytic action of I. The height of the more neg. wave increased with decreasing height of the Hg column and with increasing concn. of the acid. With increasing concn. of I it tended toward a limiting value. This wave was due to the catalytic reduction of H^+ from H_2O and not to the diffusion current as Poskeva and Gepliston (C.A. 47, 6125e) concluded. In the solns. of 0.1N LiCl and KCl this only wave was observed at −1.8 v. Its height decreased with increasing concn. of EtOH, and in 50% EtOH it was independent of the height of the Hg column.

F. Štefelda

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910009-4"

KUTA, J.

No academic degree indicated

Polarographic Institute, Czechoslovak Academy of Sciences (Polarographisches Institut, Tschechoslowakische Akademie der Wissenschaften), Prague

Prague, Collection of Czechoslovak Chemical Communications, vol 27, No 10, Oct 62, pp 2349-2364.

"Influence of Surface-Active Substances on Polarographic Currents VI. Momentary Currents and Gradated Formations in Some Reversible Systems in the Presence of Rapidly Absorbed Charged and Uncharged Surface-Active Substances."

Co-author:

SMOLER, I., Polarographic Institute, Czechoslovak Academy of Sciences (Polarographisches Institut, Tschechoslowakische Akademie der Wissenschaften), Prague

Kůta, J

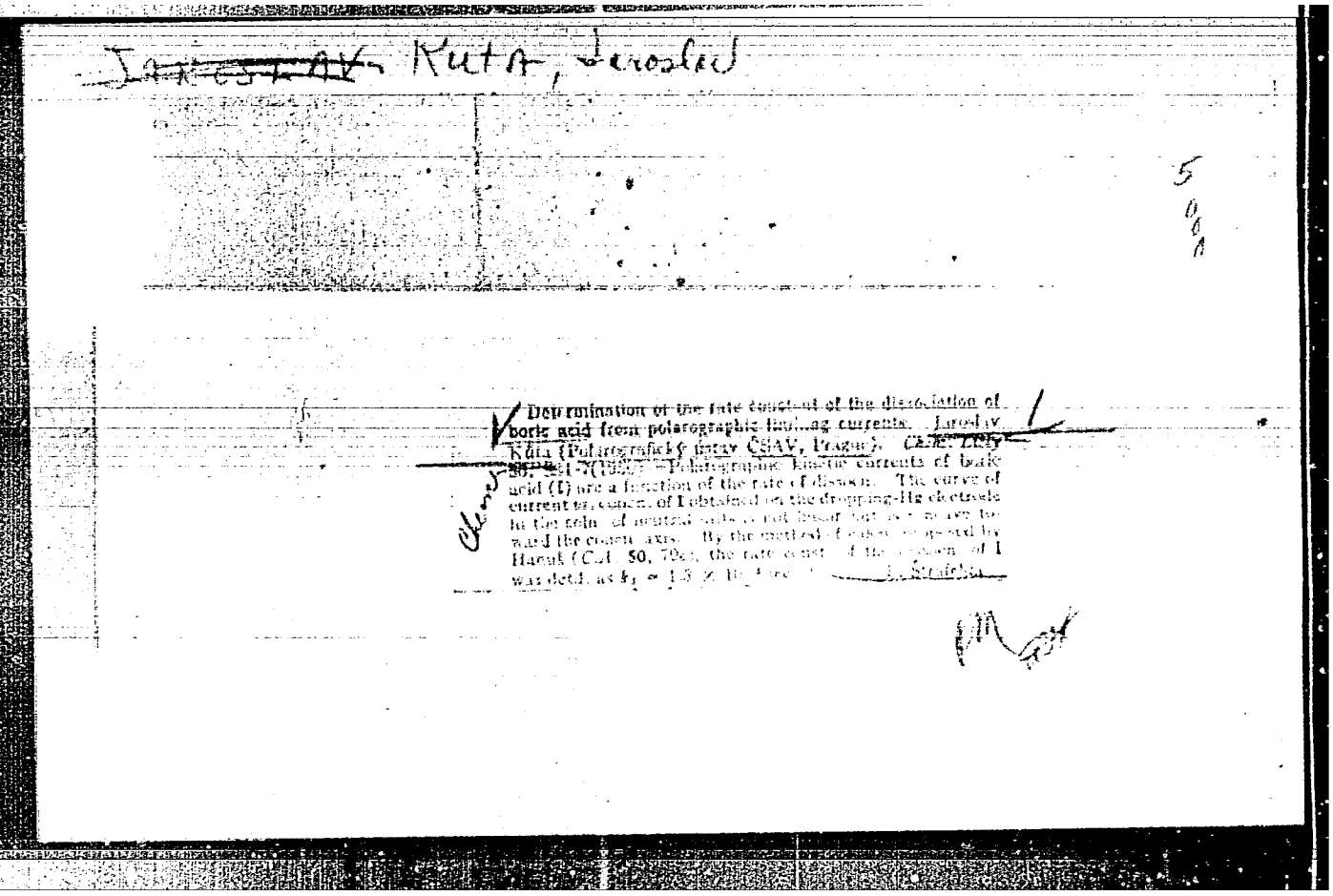
CZECH

Polarographic reduction of oxalic acid. J. Kůta (Polarografický ústav ČSAV, Prague). Chem. Listy 48, 781-2 (1954).—A measurable polarographic wave of a height directly proportional to the concn. of oxalic acid can be obtained in solns. contg. 3×10^{-4} N HCl and 1-3 N KCl, the concn. of oxalic acid not being lower than 1×10^{-4} N. The half-wave potential is −1.3 v. P. Strafelda

The rate of recombination of oxalic acid on the dropping mercury electrode. Jaroslav Kůta (Polarografický ústav ČSAV, Prague). *Chem. Listy* 49, 1467–75(1955).—The 2-electron reduction wave of oxalic acid (I) had a diffusive nature and decreased between pH 3 and 6, in accordance with the dissocn. curve of I ($pK = 4.48$). The undissocd. I, which was subject to reduction, was supposed as being formed by the recombination of its ions near the electrode. By using the equations of Koutecký (C.A. 48, 8[illegible]), the first rate const. of the recombination of I was $k_1 = 5.5 \times 10^{-4}$ l./mol. sec. (0.2*M* Britton-Robinson buffer soln.; 2.7*N* KCl). The pH value in the neighborhood of the electrode remained const. when the concn. ratio of I and the buffer soln. had a value 1:20. F. Šorm

KUTA, JAROSLAV

The effect of electrolyte solutions on the reduction of oxalic acid. Jaroslav Kuta (Czechoslov. Acad. Sci., Prague). *Acta Chim. Acad. Sci. Hung.* 9, 119-32(1956) (in German)(English summary); cf. *C.A.* 51, 11855e.—The polarographic reduction of oxalic acid in phosphate or citrate buffers (pH 2 to 3), or in 0.01-0.1*M* HCl, is not observable before the H^+ ion reduces, but if the soln. is made *N* in KCl, a wave appears whose height is proportional to the oxalic acid concn. A large KCl concn. (approx. 2*M*) leads to a max. of the 2nd kind. $MgCl_2$ (0.1 to 1*M*) or sulfates lessen the effect; NH_4Cl or KI act similarly to KCl. Increasing the pH lowers the wave height, and this effect is increased at the lower temps. The KCl effect is accomplished by a shift of the oxalic acid reduction potential to more pos. voltages. The half-wave potential depends on the amt. of KCl used. The influence of the nature of the supporting electrolyte on the polarographic behaviors of a number of types of org. substances is also reviewed. 56 references. H. K. Zimmerman



Kuta, Jaroslav

Determination of the rate constant of the dissociation of boric acid from polarographic limiting currents. Jaroslav Kůta (Polarografický ústav ČSAV, Prague). *Chem. Listy* 50, 1756(1956).—Polarographic kinetic currents of boric acid (I) are a function of the rate of dissoen. The curve of current vs. concn. of I obtained on the dropping-Hg electrode in the soln. of neutral salts is not linear but is convex toward the concn. axis. By the method developed by Hanuš (*C.A.* 50, 70e), the rate const. of the dissoen. of I was detd. as $k_1 = 1.5 \times 10^{-4}$ sec.$^{-1}$ J. Straškraba

KOTA, JAROSLAV

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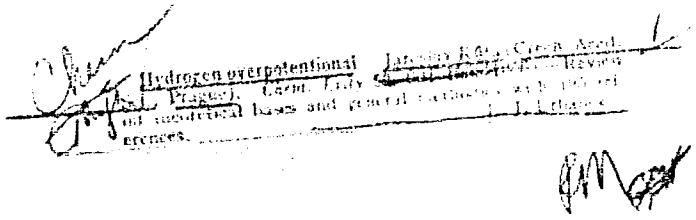

Kuta, J.

"Determination of the dissociation speed constant of boric acid from the polarographic limiting currents. In German."

p. 141 (Collection of Czechoslovak Chemical Communications. Vol. 22, no. 5, Oct. 1957, Praha, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 7, July 1958

FIRA, J.

"Effect of the basic electrolyte on the reduction of oxalic acid esters. In German."

p. 1677 (Collection of Czechoslovak Chemical Communications, Vol. 11, No. 5, Oct. 1939, Prague, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 5, No. 7, July 1956

KUTA, JAROSLAV

CZECHOSLOVAKIA/Physical Chemistry - Electrochemistry. B-12

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24330

Author : Kuta Jaroslav
Inst :
Title : Effect of Extraneous Electrolyte on Reduction of Esters of Oxalic Acid.

Orig Pub : Chem. listy, 1957, 51, No 4, 764-766

Abstract : In continuation of prior researches (RZhKhim, 1955, 42700; 1956, 71313; 1957, 40768) it is shown that on polarographic reduction of diethyl ester, monoethyl ester and their anions, and also of anion of oxalic acid (I) there is observed a shifting of their waves in the positive direction in the presence of polyvalent cathions (Al^{3+}, La^{3+}, Ca^{2+}, Ba^{2+}). In unbuffered solutions these cathions increase the height of the wave. Hydrolysis of diethyl ester of I is catalyzed by bases.

Card 1/1 Polarographic Institute
10

CZECHOSLOVAKIA / Physical Chemistry Electrochemistry. B

Abs Jour: Ref Zhur-Khimiya, No 11, 1958 35 556

Author : Kuta Jaroslav
Inst : Not given
Title : Comparison of Hydrogen Excess on Dropping and Flowing Mercury Electrodes.

Orig Pub: Chem. Listy, 1957, 51, No 7, 1274-1282

Abstract: Polarographic curves have been plotted with the application of dropping and flowing Mg-Electrodes, at relatively high concentrations (up to 0.1 N) of strong acids in the presence of an indifferent electrolyte overtension at 1 3 · 10-5--0.1 a/cm^{-2}. A timing device for the regulation of the drop formation has been applied in the case of the dropping electrode. The (i,t) curves of the first drop have been plotted. The experimental

Card 1/3

CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry. B

Abs Jour: Ref Zhur-Khimiya, No 11, 1958, 35 556

Abstract: findings for the mean current density value i on the dropping electrode are expressed by the equation $E=const+(2RT/F)\ln[H^+]-(2RT/F)\ln \bar{I}$. The time dependence of the instantaneous current ($i=kt^n$) varies with the applied voltage before reaching the limit current i_d, so that n drops from 0.6 (lower section of the curve) to 0.5 (at E 1/2) and to 0.22 (after reaching i_d). On the application of a flowing electrode i_d is determined by a diffusion. In this case E 1/2 is negative in relation to E 1/2 of a dropping electrode with respect to the value $(RT/F)\ln(t/t_1)$ (t - contact time of Hg-flow with the solution; t_1 -- dropping period). Equations permitting to compare over-

Card 2/3

CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry. B

Abs Jour: Ref Zhur-Khimiya, No 11, 1958. 35556

Abstract: tension measurements at i constant with polarographic overtension measurement have been derived.

Card 3/3